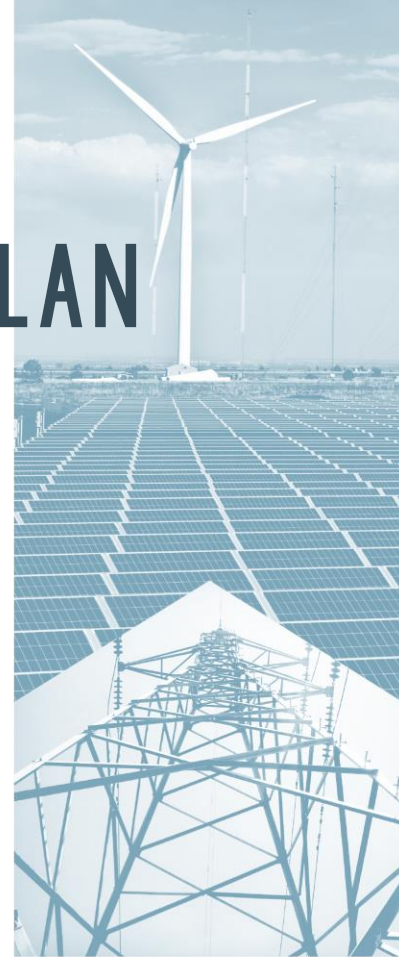




IL: RENEWABLE ENERGY ACCESS PLAN

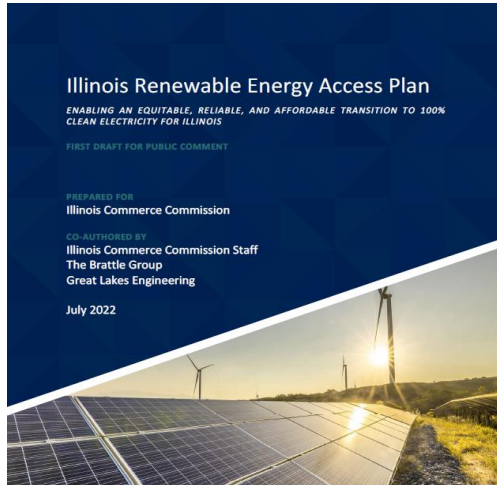
REAP Background and Siting of
Renewable Energy Access Zones

Sean R. Brady, Sr. Counsel and Regional Policy Manager



REAP and Illinois' Electric Transition

REAP will help Illinois efficiently and effectively add utility-scale clean resources so the State can attain CEJA (P.A. 102-0662) goals/targets



	Energy Target (Annual MWh)
40% RPS Target by 2030	45 million
50% RPS Target by 2040	62 million
100% Carbon-free Target by 2050	152 million
Potential Energy Needed for system Electrification	227 to 452 million

Resource Potential for Wind and Solar

Wind Potential



Solar Potential



Resource Potential:

Valuing Current Queue Locations v Open Land

Resource Potential in Illinois

Active & Under Construction

	PJM	MISO	Nameplate (MW)	Energy (MWh)
wind	4,502	3,521	8,023	28,113,030
solar	118	2,467	2,585	3,781,250
hybrid	-	-	-	

MISO+PJM Queue Data

			Nameplate (MW)	Energy (MWh)
wind			13,892	48,678,164
solar			32,557	65,595,914
hybrid			11,824	23,822,391

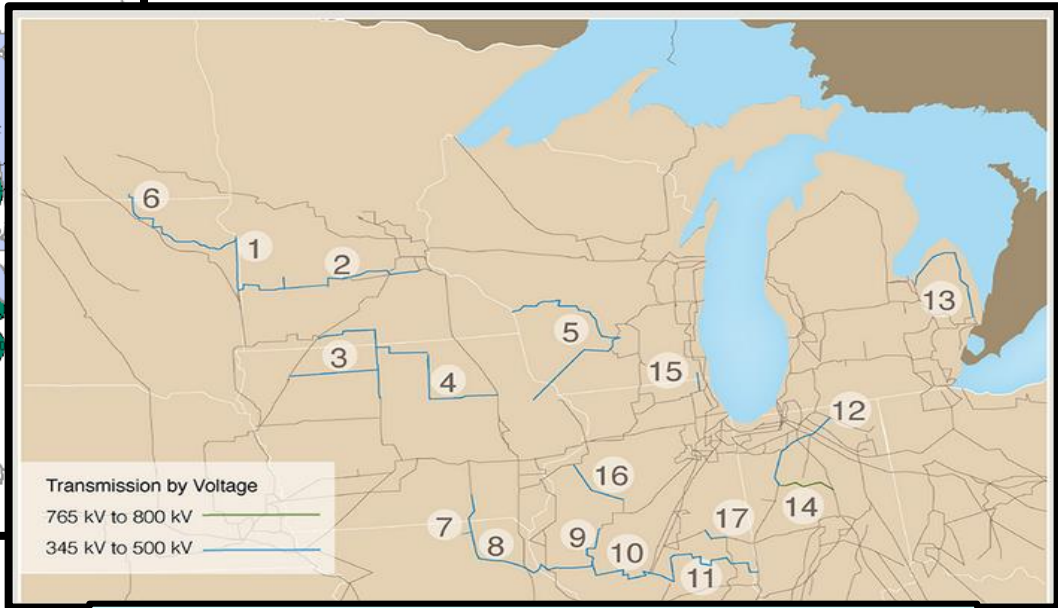
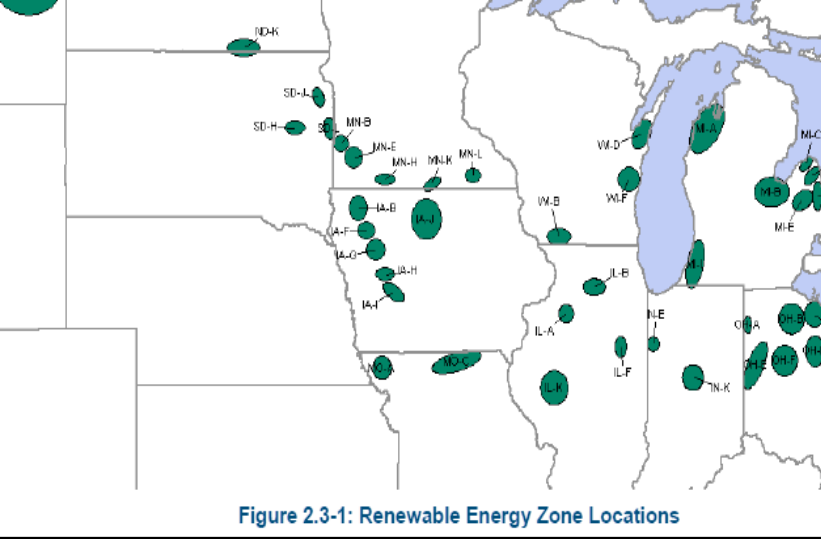
Targets

	Energy Target (MWh)
50% RPS Target by 2040	62,000,000
100% Carbon-Free Target by 2050	152,000,000
Potential Energy Need due to Electrification	227,000,000 to 452,000,000



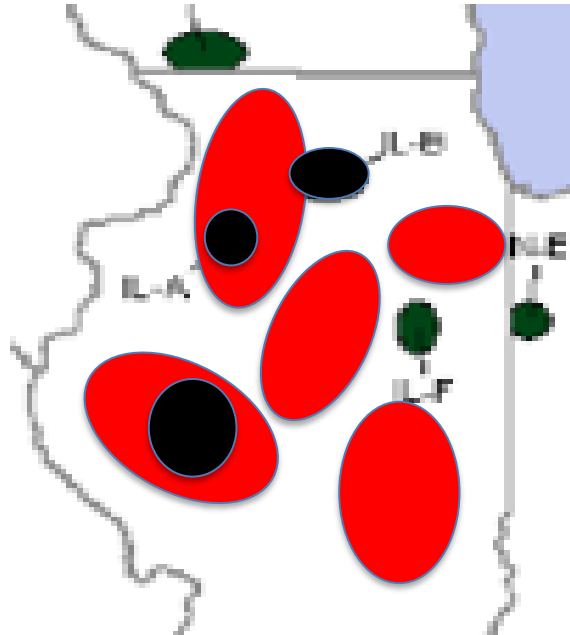
170 M MWhs

Zones that Supported Need for MISOs MVP Lines



MISO's Portfolio of MVP Transmission Lines

Expand on MISOs RGOS Zones in Illinois



Zones in red are illustrative

DRIVERS of REAZs:

- Areas with best windspeed and solar irradiance
- Location of projects currently in the PJM/MISO queue
- Open areas w/ low transmission capacity
- Areas with good wind speed and good solar irradiance

Potential Resources For Siting REAZs

Resource Potential

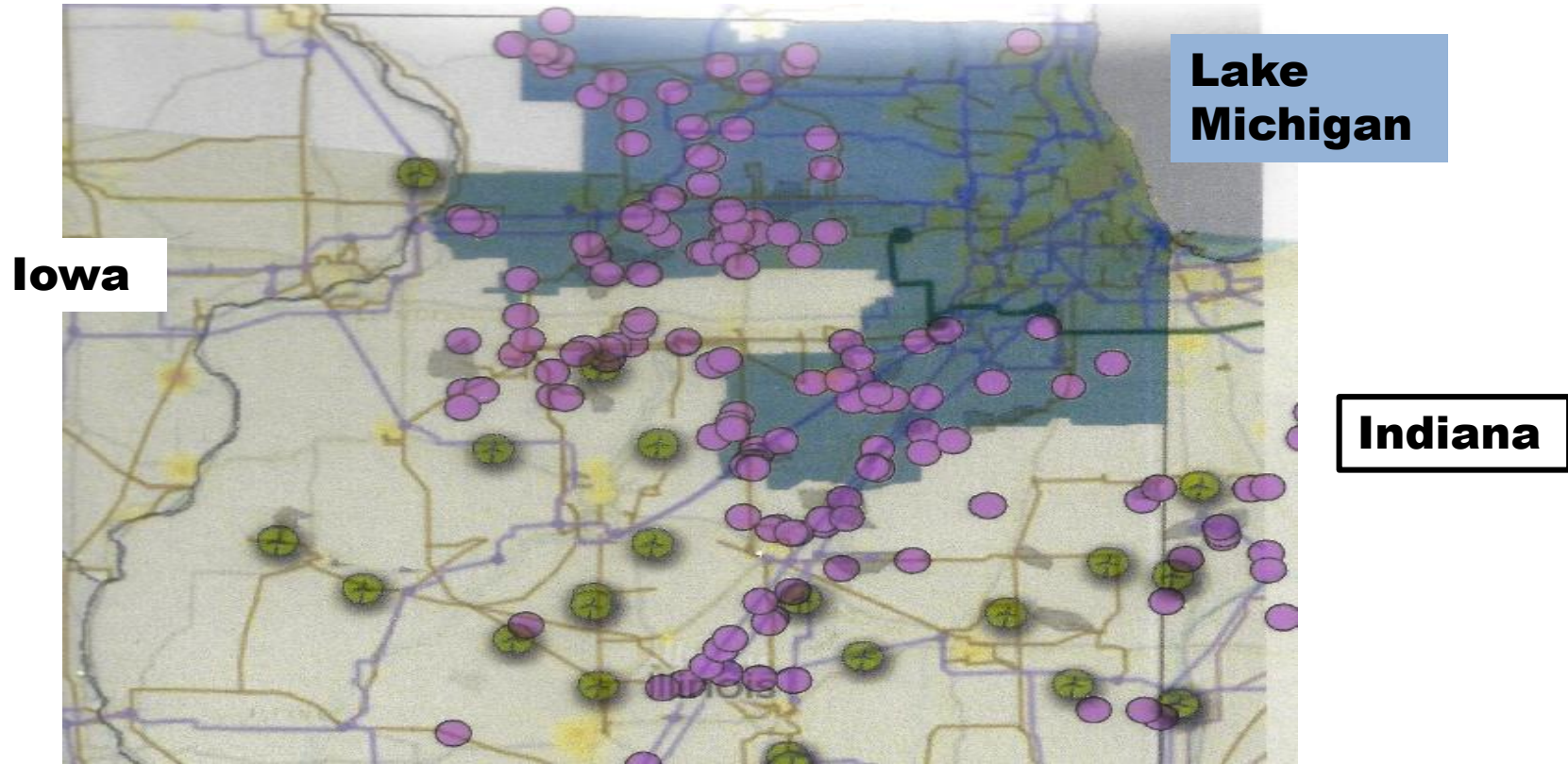
- Model wind resource capability using NREL Wind Power Resource maps for a 100m hub height (see: <https://windexchange.energy.gov/maps-data/167>)
- Model solar resources using NREL solar irradiance map (see <https://www.nrel.gov/gis/assets/images/solar-annual-ghi-2018-usa-scale-01.jpg>)

MISO & PJM transmission line maps

Maps of forested areas

Maps of urban & suburban areas

Map of Wind Projects, Transmission, & Urban Areas





THANK YOU



ADDRESS 570 Asbury Street, Suite 201, St. Paul, MN 55104

OFFICE 651.644.3400

WEB CleanGridAlliance.org

 @cleangridalliance

 @CGA_Midwest

 @clean-grid-alliance